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## II — Roman Milestones and the Capita Viarum

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WITH the recent appearance of the second fascicle of the second part of Vol. XIII of the Corpus of Latin Inscriptions, containing the milestones of the three Gauls and Germany, the publication of all known inscriptions of this class is practically complete, and a systematic study of Roman roads based partly upon these stones and partly upon the Tabula Peutingeriana, the Antonine, and other itineraries is made pos-This paper, however, does not attempt to deal with the whole question. It is confined to one point; namely, the system or systems employed in the numbering of the stones and the principle upon which this or that city, town, or other place was selected as the starting-point or caput of the road. The study has been undertaken in the belief that we have in these milestone numbers important evidence bearing not only on the question of the imperial or local character of any given Roman road, but also indications of the relative importance of different places in various parts of Italy and the provinces. Further, so far as Italy is concerned, we get light on the nature of the relations existing between Rome and the municipalities in the matter of the building and the care of the roads, and, as regards the provinces, we obtain information concerning the methods employed by the government in the Romanizing of newly acquired territory.

## I. ITALY

In central Italy the stones were for the most part numbered from Rome. For example, of the Via Appia as far as Capua there are surviving in the originals or in Ms copies nearly two score of numbered milestones.<sup>1</sup> Their numbers range from I to CXXVI m. p., and they belong to periods as early as the second century B.C. and as late as the reign of

Valentinian and Valens. With the exception of a few found on two different sections, all these stones are numbered from Rome only. On those parts of the road which show the exceptions we find in each case a system of double numbering. The first of these sections extends from Forum Appi to Terracina, and from its length was known as the decennovium. The earliest example of this double system is found on a stone going back to the time of the consul Gaius Claudius (184 B.C.), and marked both with the numeral LIII, i.e. millia passuum from Rome, and x, from Forum Appi.<sup>1</sup> There is no reason for supposing that the latter number was a later addition. The inscription is the first record of the construction of this part of the road which ran through the Pomptine marshes,2 and which was one of the most troublesome sections of the highway. It was restored by Trajan,3 who adhered to the same system of double numbering. We have stones belonging to his reign marked both from Forum Appi and from Rome as follows: 4 v (from Forum Appi), XLVIII (from Rome); vi (from Forum Appi), xLviiii (from Rome); x(from Forum Appi), LIII (from Rome). Another system of double numbering is evidenced by two stones.<sup>5</sup> One of these belongs to the reign of Caracalla and is marked IIII and LXXI. first numeral indicates that this was the fourth milestone on a section of 21 m. p. repaired by Caracalla, while the second gives the distance from Rome. The repaired section must have begun about halfway between Terracina and Fundi and ended at Formiae. The other stone bears the names of Diocletian and Maximian with the same numbering, IIII and LXXI.

On the Viae Latina, Labicana, and Praenestina,<sup>6</sup> also, the system of numbering from Rome prevails, some of the stones belonging to republican times and some to the reigns of late emperors. The farthest point from Rome indicated on any

<sup>&</sup>lt;sup>1</sup> CIL, x, 6838.

<sup>&</sup>lt;sup>2</sup> In Augustus' time, and perhaps also in the reign of Tiberius, travellers preferred to go by way of the canal which began at Forum Appi. Cf. Strabo, v, 3, 6; Horace, Sat. i, 5.

<sup>&</sup>lt;sup>3</sup> Cf. C/L, X, 6835: Imp. Caesar divi Nervae filius Nerva Traianus . . . Trib. Pot. XIIII (i.e. A.D. 110) XVIIII silice sua pecunia stravit.

<sup>&</sup>lt;sup>4</sup> CIL, x, 6833 ff. <sup>5</sup> CIL, x, 6854, 6855. <sup>6</sup> CIL, x, 6882 ff.

stone belonging to the Via Latina proper is the 96<sup>th</sup> mile. It is noticeable, however, that the numbering from Rome persists even on the branch which diverges from the main road at Venafrum and runs through Aesernia to Beneventum.¹ On this branch we have a milestone of Augustus (2 B.C.), numbered cx, one of Maxentius, cvi, and one of uncertain date, cxviii. Likewise on the Via Salaria² not only the stones on the main road are numbered from Rome, but also those on the branch which leads from Interocrium to Interamnium (via Amiternum). Both republican and imperial stones attest the same system, as we see from such inscriptions as that of Caecilius Metellus (117 B.C.) marking the 119<sup>th</sup> mile from the city, that of Augustus (12/11 B.C.) the 123<sup>d</sup> mile, and that of Valentinian and Valens the 113<sup>th</sup>.

On the Via Tiburtina et Valeria <sup>3</sup> six out of the seven stones found are numbered from Rome. Among these six is included one of Trajan's time which marks the 38<sup>th</sup> mile; it belongs not to the main road, but to the Via Sublacensis which branches from the Valeria at the 35<sup>th</sup> milestone. The stone which constitutes an exception belongs to Claudius' reign (48/49) and marks the 43<sup>d</sup> mile. It is numbered from Cerfennia, the place at which in Tiberius' time the Valeria divided, one branch going to Corfinium, the other to Marruvium. Claudius continued the road from Corfinium to Ostia Aterni on the east coast of Italy, the miles being counted from the old junction Cerfennia.

Of the Via Flaminia 4 we have only five numbered stones: xxxiv (Julian), cxx (Valerius Maximinus), clxxxvii (Constantius Maximus), cxci (Diocletian), and ccxi (Maxentius)—all numbered from Rome. They are late, but there is little doubt that in republican times, also, the mileage on this road, which was to the north what the Via Appia was to the south, was counted from the capital. The continuation of the numbering even on branch roads, which we have noticed before, is found here also, e.g. on a stone that belongs to the Via Tiberina which branches from the Via Flaminia at Saxa Rubra and joins it again at Aqua Viva, passing near Nazzano, where

<sup>&</sup>lt;sup>1</sup> CIL, 1X, 5976 ff. <sup>2</sup> CIL, 1X, 5943 ff. <sup>3</sup> CIL, 1X, 5963 ff. <sup>4</sup> CIL, XI, 6616 ff.

the stone was found. The number is xxx. Other examples are furnished by two stones numbered cxli (Valentinian) and clxxxiii (Maxentius), respectively. These were found on the road which branches from the Via Flaminia at Aesis and passes through Sentinum to Sena Gallica. Cf. also CIL, ix, 5936, cxlii (Vespasian), a stone of the Via Picena which diverges from the Flaminia at Nuceria.

On the other roads running north the numbered milestones are but few, and give us only scanty information. Moreover, none of them is earlier than the reign of Trajan. analogy of other roads leads us to suppose that in the case of the Viae Aurelia, Cassia, and Clodia the numbering, for a considerable distance at least, was from Rome; and two of the extant stones, CIL, xi, 6666 (of Trajan's reign), iiii, and 6667 (Constantine), XLII, are apparently numbered from that place, while a third, CIL, xI, 6664 (Antoninus Pius), is definitely marked: a Roma m. p. CLXXXVIII. On the other hand, in north Etruria there is evidence that both Pisa and Florence were the capita of roads; one inscription, xI, 6665 (Gratian) reads: civit(ate) Pisana m. p. IIII; and another, 6668 (Hadrian), though somewhat mutilated, is probably numbered LXXVI from Florence. The extent of Hadrian's reconstruction of the road is stated on the stone: Hadrianus . . . viam Cassiam vetustate collabsam a Clusinorum finibus Florentiam perduxit. How far back this system went we cannot say, in the absence of direct evidence, but in the case of Pisa it is reasonable to believe, on account of the importance of the place, that it was the caput of roads in its neighborhood even in republican times.

So much for central Italy. The account given shows that the custom of numbering the milestones from Rome was departed from only in the case of notable reconstructions of sections of a road, or where the size or importance of local centres, or their distance from Rome, made an exclusive numbering from the capital less desirable or less convenient.

In southern Italy the situation is different. The dominant system there is that of numbering from local centres. To this there is but one exception; namely, the Via Appia, on which we find traces of a continuous numbering from Rome. In consideration of the importance of the road and the fact that it joined Rome and Brundisium, this is what we should expect. The surprising feature of the case is the scantiness of the evidence: only one stone (CIL, IX, 6072) gives the number of miles from Rome, CLXXII. The Appia, it will be remembered, ran from Capua to Beneventum, then to Venusia, then to Tarentum, and finally to Brundisium. stone was found on the section between Beneventum and Venusia. Its importance is due chiefly to the fact that it apparently represents a series of considerable extent, all the other examples of which have been lost. The inscription on the stone itself is incomplete, but can easily be filled out from another stone (6075): Hadrianus Aug. Pont. Max. Trib. Pot. VII Cos. III Viam Appiam per millia passus xv DCCL longa vetustate amissam adiectis HS XIXLVII ad HS DLXIXC quae possessores agrorum contulerunt fecit. Probably the stones set up at the time of this restoration by Hadrian were regularly marked with the number of miles from Rome. even on this series, if we may judge from the example extant, the distance from local centres was also given. This stone has in addition to the mileage from Rome the numeral VIII, the distance from Beneventum. The four stones of the Appia found between Capua and Beneventum are all numbered from Capua: vi, xiv, xvi, and xxi. Moreover, on the Via Traiana,1 which ran from Beneventum through Apulia to Brundisium, the numbering is from Beneventum. one of the best series of milestones that we have. Twentyeight bear Trajan's name and record the fact that he built the road at his own expense; seven others contain the number only, but it is probable that they belong to the same period. The numbers range from 5 to 137 m. p.2 On the Via Aurelia Aeclanensis<sup>3</sup> the single stone that has turned up

<sup>1</sup> CIL, 1X, 6003 ff.

<sup>8</sup> CIL, IX, 6071.

is marked III, i.e. from Herdoniae or Aeclanum, probably the latter. On the Via Herculia 1 the numbering, judging from the examples extant, was from Aequum Tuticum. On the road from Puteoli to Naples<sup>2</sup> the count was made from Puteoli. On the road between Naples and Nuceria 3 we have two numbered stones: xI (Hadrian) and vI (Maxentius). The former is numbered from Nuceria, the latter from Naples. —a system of numbering in keeping with the fact that in Maxentius' time Naples was asserting herself among the cities of Campania. Many other examples might be cited to show how firmly established in this part of Italy the practice of local numbering was. For example, the stones on the roads from Capua to Cumae, Puteoli, and Naples are numbered from Capua.4 On other roads we have stones numbered from Nola and from Regium. The stone<sup>5</sup> which stands in Forum Popili on the road between Regium and Capua is unusual. It is inscribed with the distance from Forum Popili to Nuceria and Capua on the north, and to Muranum, Cosentia, Valentia, Fretum ad Statuam, and Regium on the south. It gives also the total distance from Capua to Regium, CCCXXI . . m. p. It is a directory of distances rather than a milestone. Its date is 132 B.C. Some similar examples have been found among the provincial stones.

Summing up, then, so far as southern Italy is concerned, we find that, with the exception of the Appia, the system universally adopted was that of numbering from local centres; yet the numbering from these centres was sometimes continuous for a considerable distance, running without a break through the territory of town after town, as, for example, on the Via Traiana. Speaking in general, the underlying principle of the system was that of local convenience, and the choice of the capita was largely determined by the relative importance of the various towns. That the amount of money contributed for the construction or repair of any road by the different communities which it benefited also entered into the question of the determination of the

<sup>&</sup>lt;sup>1</sup> CIL, x, 6965 ff.

<sup>&</sup>lt;sup>2</sup> CIL, x, 6926 ff.

<sup>&</sup>lt;sup>8</sup> CIL, x, 6937 ff.

<sup>4</sup> CIL, x, 6941 ff.

<sup>&</sup>lt;sup>5</sup> CIL, x, 6950.

caput cannot be doubted. For just as the Roman officials 1 who were in charge of all the roads in Italy must have relied to a considerable extent upon the cooperation of local officials. so such money as was available from the publicum aerarium for construction and repair work must in many cases have been supplemented by local contributions. That this was actually the case we know from the inscription on the Appia quoted on p. 19, and it is significant that that milestone is numbered both from Rome and Beneventum. In the provinces, as we shall see, this principle played a very large part. In the case of the Via Traiana, which was constructed at the private expense of the Emperor, the stones were numbered continuously from Beneventum to Brundisium, partly for the purpose of preserving the unity of this contribution on the part of the Emperor to public utilities, and partly because the intermediate towns were of less importance. In numbering from Brundisium, however, instead of from Rome, the Emperor was consulting the convenience of local travellers. In studying this whole question it is necessary to remember that the extent of travel and transportation in ancient as compared with modern times was relatively small. There are very few points of difference between antiquity and our own age that are more far reaching than this. To the ordinary inhabitant of southern Italy, Rome was a long way off. Every region had its own metropolis.

The situation in northern Italy is different from that in the south. In the first place, the system of recording the mileage from Rome, which in the latter region is evidenced by only one milestone of the Appia, appears upon a considerable number of stones on the chain of roads which links the Adriatic

<sup>&</sup>lt;sup>1</sup> These were at first the censors, and later special curatores viarum. Consuls and praetors also participated to some extent in the construction and repair of roads, and many emperors showed great activity in the same work. The strictness of the supervision of the Roman officials naturally varied in different periods and with different roads. In Tacitus, Ann. iii, 31, Corbulo complained in the Senate of the bad condition of the roads throughout Italy: plurima per Italiam itinera fraude mancipum et incuria magistratuum interrupta et impervia clamitando. In the provinces the roads were under the supervision of the proconsuls or imperial legates.

with the western boundary of Italy. In the second place, we have in Cisalpine Gaul many clear examples of a territorial numbering of the stones; *i.e.*, the milestones are numbered from a town only as far as the limits of the territory belonging to that town.

The great trunk road of the north was the Via Aemilia, which ran from Ariminum, the terminus of the Flaminia, to Placentia. On it we find milestones of widely different ages. Let us look first at the three which belong to the republican period, CIL, xI, 664I, 6642, and 6645, all inscribed with the words M. Aemilius, M. f. M. n. Lepidus Cos. In spite of Mommsen's doubt (he was sceptical about the antiquity of the stones chiefly on account of the closed P in Lepidus), it is reasonably certain that these belong to the original construction of the road. The form of the letter P is in all probability due to restoration, and the date of the stones is 187 B.C. Cf. Livy, xxxix, 2: M. Aemilius . . . viam . . . a Placentia, ut Flaminiae committeret, Ariminum perduxit. The stones are numbered from Rome, ccxi (?), cclxiix, and ccxxcvi, respectively. One of them, however, 6642, has in addition the number xv. This is probably the mileage from Bononia, as San Pietro, where the stone was found, is about that distance from Bologna. This number was inscribed by a different hand and in a different age. Another of the stones, moreover, 6645, has besides the mileage from Rome the distance from Bononia, IIII, and from Mutina, XXI, marked on its sides. A great chronological gap separates these stones from all the other numbered stones found on the road. The next earliest belongs to the reign of Diocletian and Maximian, and is numbered I, from Parma. Others are numbered from Ariminum.

Just as the Aemilia continues the Flaminia, so the Via Iulia Augusta continues the Aemilia, and runs from Placentia to Dertona, from Dertona to Vada Sabata, and from Vada to the river Varus, which formed the boundary of Italy. From Rome to Ariminum the distance is 221 m. p., from Ariminum to Placentia 168, from Placentia to the Varus 224, so that the whole distance from Rome to the Varus by this route is 613

miles. Figures approaching this total appear on a considerable number of stones found on the last sections of the road. The series is unique among Roman milestones in the size of the numbers, and on this account is given here in more detail than any that have yet been referred to. Belonging to the age of Augustus we have CIL, v, 8085, DLIII m. p. from Rome; 8088, DXC; 8094, DCI; 8098, DCIII; 8100, (D)CIV; 8101, DCV; 8105, DCVII. Of Hadrian's reign there are 8005, DCI; 8102, DCV; 8103, DCVI; 8106, DCVIII. Of Caracalla's reign are 8087, DXXCIX; 8089, DXC; 8090, X (this stone was found on the same site as 8089; possibly x is all that remains of a larger number); 8096, DCI; 8097, DCII; 8099, DCIII; 8104, DCVI (?); 8107, DCVIII. On two of the stones of Hadrian's reign, 8095 and 8102, we find besides the distance from Rome, DCI and DCV, also the distance from Placentia, ccxII and (ccx)vI, respectively.

On other imperial roads in this part of Italy the mileage from Rome is not given. In some cases, however, the numbering seems to have been continuous for a considerable distance. A stone which bears the name of Publius Popillius, consul in 132 B.C., and which belongs to the road from Ariminum to Altinum, is inscribed with the number LXXXI, i.e. from Ariminum. On the road which Augustus built from Concordia into Noricum. 1 the stones are numbered from Concordia at least as far as Pers. Two stones of the Via Claudia Augusta<sup>2</sup> built by Claudius from the Po to the Danube give the total length of the road, cccl, but none has survived which records an intermediate distance. The Via Flavia<sup>3</sup> built by Vespasian from Tergeste to Pola is numbered from Tergeste. Two stones 4 of the fourth century belonging to the road from Verona into Raetia mark the 37th and the 56th mile from Verona.

When we turn from these roads, all clearly imperial in character, to the series which leads from Patavium through Vicetia, Brescia, and Bergomum to Mediolanum, we find an entirely different system—a system different, moreover, from any that we have seen in central or southern Italy. The

<sup>&</sup>lt;sup>1</sup> CIL, v, 8007. <sup>2</sup> 7995 ff. <sup>3</sup> 8002 f. <sup>4</sup> 7984 ff.

numbering is not merely local in the broad sense in which we have used that term in speaking of the capita of southern Italy; it is strictly territorial. Let us look, for example, at the stones in the neighborhood of Verona. On the Vicetia side of Verona, we have stones numbered xi, ix, viii, iv, iii. Doubtless the series, if it had come down to us entire, would have taken us to the gates of Verona. On the other side of Verona, going from that city toward Brescia, we have XIX, xx, xxiii, xxvi, and xxxii. In the former case where the numbering from Verona ceases, that from Vicetia begins; in the latter where the numbering from Verona ceases, that from Brescia begins. The principle at the basis of this system is plain. The milestones from Verona extend on either side as far as the boundaries of the ager which Verona possessed; and it is the same with Vicetia and Brescia. system is so clear-cut that the milestones can be used in estimating the dimensions of the ager. While none of the stones belong to a period earlier than the third century A.D., it is probable that the care of these roads was assigned to their respective municipalities as early as the end of the first century. At any rate, the inscriptions indicate that in this region there was but little activity in road building on the part of Roman officials or emperors for more than a hundred years after the time of Vespasian.

## 2. The Provinces

Passing to the provinces, we find the system of numbering varying with the system of control which the Romans adopted in different parts of their empire. How faithfully so small a detail as the inscriptions on the milestones reflects the general policy of the central government at Rome may be seen by comparing the stones of Narbonensis with those of the three Gauls and Germany. When Augustus assumed control of affairs, the Romanization of Narbonensis—the Province, as it was called—had gone infinitely further than that of Aquitania, Celtica, and Belgica. The Province was ripe for complete reorganization along strictly Roman lines.

Coloniae had been founded there as early as the second century B.C., Julius Caesar had added others, and Augustus developed still further the plans of his uncle. The old cantonal system yielded everywhere to the Latin municipality, as examples of which may be mentioned Forum Iuli, Aquae Sextiae, Arelate, Nemausus, and Narbo. For the most part these communities cared for the roads in their territory. the eastern part of the province we find milestones numbered from Forum Iuli toward Aquae Sextiae 1 (Aix) as far as the 33d mile. The stones numbered from Aquae Sextiae toward Arelate (Arles)—the highest number is xvIII—are succeeded by a series numbered from Arelate toward Aquae Sextiae which takes us up to the first milestone outside of the former city. The boundary between the territories of these two towns is thus clearly defined. We find no such sharp division, however, between Arelate and Nemausus (Nîmes) or between Nemausus and Narbo. This part of the Via Domitia — for it is to this road that all the sections discussed in this paragraph belong - shows a series of milestones of Tiberius' reign which are numbered from Narbo through to Nemausus, — LXII, LXIII, LXVII (?), LXII, LXXIII, LXXXIIII, LXXXV,2 and LXXXVII are extant—and from Nemausus are continued to Arelate. In all likelihood this section was repaired under the immediate direction of Roman officials. This supposition becomes still more probable when we examine the extreme western section of the Domitia; namely, that between Narbo and the boundaries of Spain, for there we find two stones of Augustus' reign with three numbers each. One of these, CIL, XII, 5668, is numbered XVI, DCCCCXVII, and DCCCXCVIII, i.e. 16 miles from Narbo and 917 and 898 miles from Rome, the latter number indicating a shorter route. The other stone is marked xx, i.e. from Narbo, and DCCCCXXI and DCCCCII, from Rome. It is not likely that the whole expense of the work on these sections of the road was met by the Roman government, but it is

<sup>1</sup> CIL, XII, 5454 ff.

<sup>&</sup>lt;sup>2</sup> Bears Claudius' name; but as it is the only one of his reign, it was probably substituted for one of the original series of Tiberius.

reasonable to assume that a part of it was. It is interesting to note that, while the stones of Tiberius' reign between Narbo and Nemausus are numbered through from Narbo, some traces have survived from the time of Antoninus Pius of a numbering from Nemausus toward Narbo.<sup>1</sup>

In the three Gauls, on the other hand, we find Roman coloniae and municipia playing a very subordinate part. There was, to be sure, Lugdunum, founded by Plancus (43 B.C.), a Roman town and the capital of the three provinces. Moreover, we find it stated in Strabo<sup>2</sup> that Agrippa made Lugdunum the centre of the road system of the country, building from it four great highways - one to Arelate on the south, one to Gesoriacum (Boulogne) on the north, one to Burdigala (Bordeaux) on the west, and one to the Rhine. From this definite statement by Strabo we might expect that Lugdunum would be to the three Gauls what Rome was to Italy, and that the roads for a considerable distance, at any rate, would be equipped with milestones numbered from it. But if there ever were such milestones, none has survived, and curiously enough among the hundreds of stones found in these provinces and belonging to the first, second, and third centuries of the empire, not a single one has turned up that shows a numbering from Lugdunum. We must infer from this that Lugdunum had no ager. The earliest group of stones belongs to the reign of Claudius, and these well illustrate the system which in its main features persisted through the empire. Prominent among the capita from which the miles are counted are Andematunnum, Augustonemetum, Mediolanum Santonum, Vorganium, and Augustodurum. The principle of selection is obvious: Andematunnum (Langres) was the old capital of the Lingones; Augustonemetum (Clermont) was the capital of the Arverni, Mediolanum Santonum (Saintes) the capital of the Santones, Vorganium the capital of Osismii, and Augustodurum of the Bodiocasses. Moreover, not only were the old tribal capitals retained as the capita of the roads, but the distance to which the stones were numbered from the capitals corresponds to the area of the territory occupied by the different tribes. Under subsequent emperors the same thing recurs. For example, milestones belonging to Trajan's reign show us as capita, besides some of the places already mentioned, Aventicum, Burdigala, Noviomagus, and Visontio. Aventicum (Avenches) was the chief city of the Helvetii, Burdigala of the Vivisci on the aestuary of the Garonne, Noviomagus (Lisieux) of the Lexovii, Visontio of the Sequani. To enumerate the capita that are found on the milestones of still later emperors would involve needless repetition. So far as the principle of numbering is concerned, there is little or no change. There is much truth in Desjardins's remark that the geography of Gaul changed so little in the course of three hundred years that Ptolemy's work written in the second century is a safe guide for 180 years before his time and 100 years after.

Exceptions to the rule of retaining the old tribal capital as the caput of the roads in the territory of that tribe are found even as early as the reign of Claudius. Moguntiacum was doubtless made the caput of roads running along the Rhine, because it was the headquarters of the legions quartered in upper Germany; the same is true of Colonia Agrippinensis, the headquarters of the legions which occupied lower Germany. On a stone of the second century we find Sumelocenna as caput; it was the chief place not of a tribe, but of an imperial saltus. Moreover, some stones belonging to the reign of Antoninus Pius give not only the mileage from Limonum (Poitiers), the capital of the Pictones, on the road toward Fines the boundary of the territory, but also the distance from Fines back toward Limonum. A stone of the fourth century gives Aquae Helvetiorum as caput of a road, though this was not the capital of the Helvetians. There are some traces, also, of a numbering that extended over a considerable distance without regard to tribal boundaries. For example, a stone of Claudius' reign, found between Montluel and Meximieux, is numbered cxix.4 It seems to

<sup>&</sup>lt;sup>1</sup> Caes. B. G. iii, 9; viii, 75; Strabo, iv, 1, 114. <sup>2</sup> Caes B. G. i, 38.

<sup>&</sup>lt;sup>3</sup> Géographie historique et administrative de la Gaule romaine, III, 345.

<sup>4</sup> CIL, XIII, 9055.

belong, as Othmer has aptly suggested, to a road running from the Alpis Graia to Lugdunum and to be numbered from the former point. From the reign of Antoninus Pius we have a stone, found in situ just outside Moguntiacum and numbered LXXXVIII, *i.e.* from Augusta Treverorum. Of intermediate stones giving evidence of a continuous numbering on this road there are no examples. Probably this method was confined to the terminal stone.

Very few numbered milestones have been found in Britain, nor do any of those that are extant show a numbering from Camulodunum or from Londinium, as might have been expected. One 1 may possibly be numbered from Lindum (Lincoln), and another is definitely marked: a Ratis II, i.e. two miles from Ratae, a place on the Fosseway between Londinium and Lindum.

In Spain the most important road was the Via Augusta. Starting from the pass of Puycerda in the Pyrenees it ran south and southwest to the upper reaches of the river Baetis, and from that region on through Baetica to Gades. Some stones that have survived show that for a certain distance, at least, the numbering on the upper part of the road was from the pass of the Pyrenees. To this system belong the two republican stones found near Ilerda (Lerida) and marked XCII and XCIIII, respectively.<sup>2</sup> Just how far this numbering extended cannot be determined. The stone of Claudius' reign numbered ccxvIII may be another example, but when we get as far as Castulo, we find traces of a numbering for a short distance, at any rate, from that place, and it is quite possible that other intermediate towns served as capita. From the point where the road crosses the Baetis, however, a new system, which is perfectly clear and well defined, begins. in that region forms the boundary between Baetica and Tarraconensis, and there an arch in honor of Augustus, called the ianus Augusti, was erected. It is from this arch that all the rest of the milestones, down even to Gades, are numbered. This system was established by Augustus, from whose reign we have stones numbered LXXI, LXXIV, LXXV, LXXVII, and

LXXXI. Subsequent emperors followed the same plan: belonging to the reign of Tiberius there are stones ab iano Augusti LXIV, LXVII, LXXXI, and LXXXIII; from Nero's reign comes the highest number, CCXXII. This last stone was found between Hasta and Gades, but was not in situ, for making our calculation from the itinerary found at Aquae Apollinares, Gades was about 250 miles from the place on the Baetis where the arch of Augustus must have stood, namely, between Castulo and ad Noulas.

The Via Augusta was the great imperial road of Spain, and as it was a continuation of the Via Domitia of southern Gaul, the latter being a continuation of the Iulia Augusta, Aemilia, and Flaminia, it formed one link in a chain of roads which had no parallel in the Roman Empire and which literally joined Rome to the Atlantic Ocean.

Other examples of long distance numbering are found in Spain, for while there is no doubt that if there were a larger number of stones extant, many of the coloniae and municipia would be found serving as capita for the roads in their territory, yet the evidence of the stones that have survived shows that there was in this province a distinct tendency in the direction of continuous numbering for distances far beyond the territory of individual towns. Besides the long distance numbering on both the upper and the lower parts of the Augusta, we find a striking example in the case of the road running from Emerita, the capital of Lusitania, to Salmantica in the northern part of the same province. The stones, some of which belong to the reign of Claudius and others to the second and third centuries, are numbered from Emerita for a distance of 168 miles. Without doubt, the series originally covered the whole distance between the two cities, 183 miles. It is to be regretted that we have no milestones from the roads that led south from Emerita to Corduba and Hispalis in the province of Baetica. It would be interesting to know whether the political and commercial importance of Emerita was great enough to make it an interprovincial caput so that the milestones even on the Baetican side of the boundary were numbered from it.

Among the remaining capita of this province the most noticeable are the capitals of some of the conventus into which Augustus subdivided the three provinces of Spain. are extant, for example, a great many numbered stones from Bracara Augusta, the chief place of one of the conventus of northwestern Tarraconensis. These stones appear first in the reign of Augustus, and are continued through the first, second, third, and fourth centuries of the empire. One road runs to Olisipo (Lisbon) by way of Portus Cale (Oporto); on it the stones numbered from Bracara are found on the section between Bracara and Portus Cale; i.e. they are confined to the territory of the conventus. In the same way the many numbered stones found on the four roads that lead by different routes to Asturica Augusta, the capital of another conventus, are on the Bracara side of the boundary between the two conventus. The numbers on these stones run from I to LXVI. Other capitals of conventus that appear also as capita of roads are Caesaraugusta and Carthago Nova.

The preceding examples show that the distance to which the stones were numbered from their capita was controlled in some cases by provincial boundaries, - the system on the upper part of the Augusta is not found outside of Tarraconensis, that on the lower part is confined to Baetica, —in other cases by the boundaries of conventus, as in the Bracara group. On the other hand, it must be noticed that the milestone numbers on the roads from the capitals of provinces or conventus are not always continuous to the boundaries of the province or the conventus, e.g. those on the roads from Caesaraugusta; furthermore, places other than the capitals of provinces or conventus appear as capita of roads. In the conventus of Bracara itself we have five stones numbered from Aquae Flaviae. Three of these (IV, XLII, and XLIII) are of Trajan's reign; two (II and v) of Hadrian's. In the conventus Cluniacensis, moreover, in Tarraconensis, we have no examples of stones numbered from Clunia, the chief place of the conventus, but find some marked a Pisoraca (i.e. the river of that name) I, C (?), CLXXX (?), and others numbered from Augustobriga, III, IX, X. These two places were the seats of military encampments. In the southern conventus of Baetica, of which Gades was the chief place, some stones are numbered from Malaca.

In Africa a conspicuous example of continuous numbering is furnished by the military road from Carthage to the camp at Theveste, where were the headquarters of the troops that protected Roman Africa from the tribes that infested the southern frontier. About forty stones 1 are extant, the earliest belonging to the reign of Hadrian, others to a restoration by Caracalla, others to another restoration by Julius Verus Maximinus (237 A.D.), and still others to the reigns of later emperors. With a good many gaps and some duplicates the stones run from xx up to cxci. All are numbered from Carthage. The work in Hadrian's reign was, as we know from the inscriptions, carried through under the immediate supervision of the imperial legatus pro praetore, Publius Metilius Secundus, who employed for the purpose the soldiers of the legio tertia Augusta. If the communities through which the road passed contributed anything to the construction, their contribution was not regarded by Hadrian's representative as important enough to justify a local numbering. Subsequent emperors or their officials adhered to Hadrian's system, though in their time, in accordance with the increased tendency toward local construction and local numbering, participation by the communities in the work of repair or construction can be regarded as certain. Different was the history of the other military roads which ran from Theveste. For example, some inscriptions belonging to the reign of Tiberius<sup>2</sup> show that in his time the milestones were numbered continuously on the road from Theveste to Tacapae on the Syrtis Minor. In later times, however, places intermediate between Tacapae and Theveste were used as capita for their districts. Cf. CIL, VIII, 10035, a stone of the fourth century, which has the number xxII, i.e. from Thelepte toward Theveste. Cf. also 10034, xxi, from the same place. There are stones - one of them belongs to Caracalla's reign which show that Capsa was the caput of the road running to

<sup>&</sup>lt;sup>1</sup> CIL, VIII, 10046 ff.

<sup>&</sup>lt;sup>2</sup> CIL, VIII, 10018, 10023.

Thusurus, and it is quite possible that as early as this it served as an intermediate caput on the road between Theveste and Tacapae. On the road from Theveste to Hippo Regius one stone shows a numbering from Theveste, xx. The construction of this road belongs to the reign of Vespasian and was supervised by the imperial legatus pro praetore, Publius Egnatius Cato. Another stone <sup>1</sup> on this road gives a list of the chief cities of Africa, and the distance to each one from the point where the stone stood. On the road from Theveste to Cirta, while some stones are numbered from Cirta and some from Theveste, others are numbered from intermediate points.

About the middle of the second century the military headquarters were transferred from Theveste westward to Lambaesis. Between Theveste and Lambaesis were the towns Mascula and Timgad. On the road running through this series of settlements the numbering is first from Theveste, then from Mascula, then from Timgad. The inscriptions on many of the stones show that the different sections were constructed by the colonies in whose territory they were. CIL, VIII, 10206 is typical of a large number: A Col. M. P. Res. P. Col. Thamug. 1 [i.e. respublica colonorum Thamugadensium; A Colonia M. P. I]. When we find this system of municipal construction and municipal numbering adopted on a road like this, which was primarily a military highway, we can form some idea of the extent to which the same system was used on roads that were not military. Large numbers of inscriptions show that it was the dominant system of Africa. While the number of stones is very great, — much greater than in any other province in the empire, - the frequency with which the name of the community is specifically given on the stone as the builder and the caput of the road facilitates the work of examination.

In Palestine we have a stone (162 A.D.) marked v from Jerusalem on the road which led first to Neapolis, and then dividing went to Tyre on the one hand and Damascus on the other. On the coast road of Syria we have an interesting

example of continuous numbering on a stone of the age of Marcus Aurelius found north of Berytus. It is numbered ccxv, which is the distance from Gaza, an important place on the caravan route from Egypt. The stone has also a local number, xI, from Berytus. Cf. also a stone of the fourth century found at the mouth of the Nahr El Kelb. It has indications of two numbers:  $\theta$ , that is, the ninth mile from Berytus, and a large number in Roman numerals which, though mutilated, can, by means of comparison with the last inscription, be restored as ccxIII, the distance from Gaza. In the same way the inscription CIL, III, I17, should be restored with the mileage from Gaza or Petra. Other milestones of Syria show a numbering from local centres, e.g. II, from Sidon (CIL, III, 205); I from Berytus (Le Bas, Explication, III, p. 440).

In the province of Asia we see how an attempt to make Ephesus the caput of the whole country failed. A milestone of the republican period bearing the name of Manius Aquilius consul in 129 B.C., and found on the road leading from Ephesus to Pergamum by way of Smyrna, is numbered cxxxi, from Ephesus; a stone of Claudius' reign also, found about three miles from Smyrna on the road from Ephesus to Lampsacus, is numbered from Ephesus. The number is probably xxxxii. In later times, however, this plan yielded to that of numbering from local centres.<sup>2</sup>

Along the Danube the military posts served as capita from which the stones were numbered, in some cases for considerable distances. A long series running from Aquincum, the capital of Pannonia Inferior, is extant, one stone of the reign of Alexander Severus being numbered ccxxv. The stones on the road leading north from the same place are met by a series numbered from Brigetio, higher up the river in Pannonia Superior, and it is noteworthy that the numbering from Brigetio extends beyond the boundary between the two provinces. Other capita are Carnuntum and Vindobona. Belonging to the great road which ran all the way across the

<sup>&</sup>lt;sup>1</sup> Cf. Le Bas, *ib.*, p. 10.

<sup>&</sup>lt;sup>2</sup> Cf. CIL, III, 466; ib. 474, VI from Smyrna; 478, II from Smyrna; 480, V from Alabanda.

southern regions of Pannonia Superior and Inferior, from Atrans to Singidunum, we have a stone numbered cxxxvII, apparently from Singidunum. In Noricum the municipia and coloniae, which on account of the proximity to Italy flourished here as in no other part of the Danubian lands, were the capita; e.g. Celeia, Virunum, Teurnia, and Iuvavum. On the road which led from Teurnia to Iuvavum through a spur of the Alps, the stones were numbered from each place up to the ridge of the mountains which lay between them. From Teurnia we have IIXXX, XL, XLI, XLII, XLV, and LIV; from Iuvavum XIII.

To sum up in conclusion, there are in all four more or less clearly defined systems of numbering:

- (1) The numbering from Rome is found only in central Italy, and to some extent on the Appia in the south and on the Aemilia and its continuations in the north. The most distant point from Rome marked on any stone is the 917th mile, given on a milestone of the Domitia between Narbo and Spain.<sup>1</sup>
- (2) Continuous numbering from some place other than Rome occurs in southern and in northern Italy, in the Gallic provinces (occasionally), in Spain, in Africa (between Carthage and Theveste), in Syria (on caravan routes), in Asia Minor (from Ephesus), and along the Danube. Roughly speaking, the capita are either military posts or places of preëminent political or commercial importance. Conspicuous among the military posts are Theveste in Africa, the camps along the Danube in the Pannonian provinces, the Italian capita of the roads leading into Raetia and Noricum, and the headquarters of the troops on the Rhine, Moguntiacum and Colonia Agrippinensis. Of political or commercial centres we may mention Narbo in Gallia Narbonensis, Emerita and Carthago Nova in Spain, Gaza in Syria, and Ephesus in Asia.
- (3) In the three Gauls the system of numbering was adjusted to the old tribal division of the lands.
- (4) The system of numbering according to the territory of the different towns is found most clearly defined in Cisalpine Gaul, in Narbonensis, in Africa, and in Noricum.